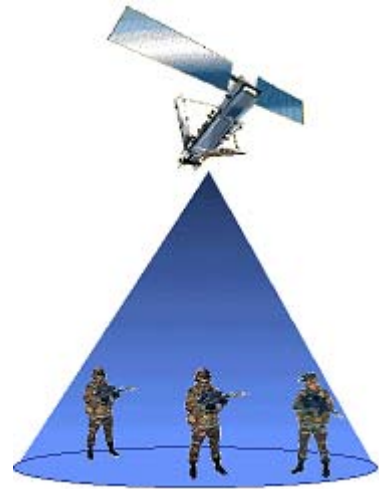


Expeditionary Tactical Communications System (ETCS)

Purpose: To provide voice and data, over-the-horizon (OTH), on-the-move (OTM) communications to the mounted and dismounted tactical warfighter.

Background: The Marine Corps Combat Development Command (MCCDC) identified the need for an OTH tactical communications capability to support Expeditionary Maneuver Warfare (EMW) that is not currently met by any program of record. This requirement is to enable Ship to Objective Maneuver (STOM) at the tactical level over a 200 nautical-mile area with minimum ground infrastructure. It must provide an assured OTM capability to dismounted tactical maneuver units and fires and logistic assets operating in complex terrain. After review of the Universal Needs Statement, the Commanding General of MCCDC directed the Lab to investigate capabilities for experimentation in the SV04 AWE. Due to contingency operations that impacted the availability of FMF users, the ETCS Extended User Evaluation (EUE) portion of the SV04 AWE is being conducted with II MEF forces OCONUS. ETCS will provide the OTH communications backbone during the MCWL-sponsored Sea Viking 06 (SV06) Advanced Warfighting Experiment (AWE).



Description: ETCS is a modified version of the commercial Iridium system that will provide netted (one-to-many) push-to-talk communications vice the current point-to-point, dial-up capability. It will provide OTH and OTM communications between the seabased C2 nodes and elements ashore down to the dismounted company commander and reconnaissance team. The system is based upon a modified Motorola 9505 handset with an integrated Global Positioning System and a Group Radio Controller to manage the voice/data traffic and the individual nets. ETCS will be fitted aboard ship and in an OTM Combat Operations Center in the SV06 AWE that is scheduled for June 2006. It will be integrated with current Marine Corps Systems such as the Command and Control Personal Computer (C2PC) application to provide extended netted communications over greater distances than the required 200 nautical miles without ground infrastructure. With MCWL's Command and Control Integration Translator (CCIT), ETCS supports injection of blue PLI into the C2PC application.

Deliverable Products: Prototype system of 400 Global net Radios for operational experimentation, requirements documentation, and recommendations to MCCDC.

Milestones:

TASK	FY06
Software Development	▲
System Improvements	▲
OIF II Extended User Evaluation	▲
Assessment	▲
Sea Viking 06 AWE	▲

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